REMARKS

Claims 1-28 are pending in the present application. Claims 1, 3-7, 10, 16-20, and 29-30 are rejected under 35 U.S.C. 103. Claims 2, 8, 9, 11-15, 21-28, and 31 are withdrawn and canceled in response to a restriction requirement. Claims 3, 6, and 16 are amended. No new matter is added. The rejections are respectfully traversed in light of the following remarks, and reconsideration is requested.

Claims 3 and 6 were objected to as depending on canceled claim 2. Claims 3 and 6 are amended to depend on claim 1.

Rejections under 35 U.S.C. 103

Claims 1 and 4 were rejected as being unpatentable over Kataoka et al. (U.S. 6,016,178) in view of Morozumi (Re 33882). In rejecting claim 1, the Examiner states, in part, that

When adding Morozumi's white filter (which is an organic insulating layer also) to Kataoka et al's display (Fig. 7), it will be manufactured the same and thus the organic insulating layer (7) including a plurality of first portions disposed between the color filter (13r, 13g, 13b) and the first pixel electrode (4b) and a plurality of second portions (which is Morozumi's white organic insulating filter) and the insulating layer (7) of Kataoka et al under the second pixel electrodes has a thickness larger than the first portions (7 shown above 13r, 13g, 13b).

Morozumi discloses a "red filter 161, green filter 162, blue filter 163 and white filter 164 are formed as one block, and a plurality of these blocks are arranged in a matrix." (Col. 10, lines 51-53; Fig. 16) (emphasis added). Thus, Morozumi implies that the red, green, blue, and white filters are all the same thickness, since they are formed as a single block. There is not even a suggestion that one or more of the filters, including the white or transparent filter, have different thicknesses. In fact, in a reference (Takizawa) previously cited by the Examiner

(and discussed in a prior response), color portions (RGB) are thicker than light colored portions of a transparent layer.

Kataoka, as the Examiner points out, discloses three primary color filters 13r, 13g, and 13b, such as shown at Figs. 7 and 8, where all three color filters are the same thickness and their overlying phase shifter layer 7 also being the same thickness. Kataoka does not teach or suggest white or transparent filters.

Thus, even if Morozumi and Kataoka can be properly combined, Applicants contend that such a combination would not render obvious the limitations recited in claim I. In particular, if Morozumi's white or transparent filter were added to Kataoka, it is clear that the overlying phase shifter layer 7 would be the same thickness portions of layer 7 over the RGB portions. The reason is that Morozumi suggests that all 4 filters are the same thickness, or at a minimum, that they are not different thicknesses. In the Office Action, the Examiner draws in where the white filter and shifter layer 7 may be located. Specifically, the white organic filter is placed on a layer below the RGB filters. There is no suggestion or teaching of this type of placement.

Further, Applicants contend that phase shifter layer 7 is not an organic insulating layer, as recited in claim 1. Phase shifter layer 7 is "formed from a polymer containing liquid crystal molecules, which are uniaxially oriented along the optical anisotropic axis." (Col. 7, lines 40-42). Applicants believe that those skilled in the art would not consider a polymer containing liquid crystal molecules to be an organic insulating layer.

Accordingly, Applicants believe that claim 1 is patentable over Kataoka et al. in view of Morozumi.

Independent claim 16 was rejected as being unpatentable over Kadota et al. (U.S. 6,031,512) and of Morozumi (Re 33882) and of Park et al. (U.S. 20020074549) in view of Suzuki et al. (U.S. 6,081,309). In particular, the Examiner cites Suzuki as disclosing, in Fig.

4, pixel electrodes formed on the blue filter having a smaller area than pixel electrodes formed on the red or green filters. However, Suzuki does not teach or suggest white or transparent filters or area sizes of pixel electrodes formed on white or transparent filters.

In contrast, claim 16 has been amended to recite that "the pixel electrodes formed on the blue filter and transparent filter have a smaller area than the pixel electrodes formed on the red or green filters". Support for the claim amendment is found in Applicants' specification at page 7, lines 3-5. Thus, no new matter is added. Advantageously, as set forth in Applicants' specification at page 7, lines 5-7, "[s]ince the transmittance of the white pixel is about three times that of the other pixels, the white pixel having an area equal to only thirds of another pixel has the transmittance equal to another pixel."

Thus, claim 16 is believed patentable over the cited references.

Various other references (Kawase (U.S. 6,787,275), Sunohara (U.S. 5,587,819), Yamada (U.S. 6,798,471), Kim (U.S. 20020145695), and Abukawa et al. (U.S. 5,642,176)) were cited for teaching the limitations of the dependent claims.

In reviewing these five references, Applicants believe that none of these references remedies the deficiencies of the references applied to claims 1 and 16 and discussed above.

Accordingly, Applicants believe claims 1 and 16 are patentable over the cited references.

The remaining claims depend on claims 1 and 16 and would thus be patentable for at least the same reasons as claims 1 and 16.

Therefore, Applicants respectfully request reconsideration and withdrawal of the rejections under 35 U.S.C. 103.

CONCLUSION

For the foregoing reasons, Applicants believes pending claims 1, 3-7, 10, 16-20, 29, and 30 are allowable, and a notice of allowance is respectfully requested. If the Examiner has any questions regarding the application, the Examiner is invited to call the undersigned Attorney at (949) 752-7040.

Certification of Facsimile Transmission

I hereby certify that this paper is being facsimile transmitted to the U-S. Patent and Trademark Office on the date shown below.

Date of Signature

Respectfully submitted,

Tom Chen

Attorney for Applicants

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